

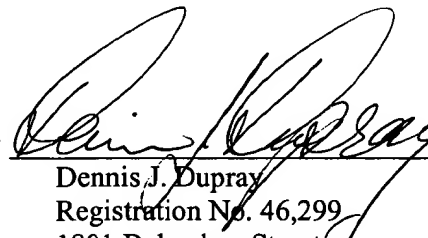
REMARKS

The amendments to the claims herein are to correct wording in Claims 179 and 350. These amendments correct typographical errors in these claims. In particular, in Claim 179, the word —information—was inadvertently provided in this claim. Additionally, in Claim 350, there are typographical errors in the references to the paragraphs labeled (b1) through (b5), wherein these paragraphs were referenced as "(c1) through (c5)" by mistake. These typographical errors have been corrected to recite —(b1) through (b5)--. Furthermore, in paragraph (d2) of Claim 350, the word —and— was inadvertently omitted, and has now been added. Additionally, a colon in this same paragraph of Claim 350 was misplaced and has now been corrected. It is believed that amendments such as provided here do not narrow the scope of the claims for any reason related to the statutory requirements for a patent.

It is requested that the Examiner review the claims hereinbelow and specifically identify any of the amendments that the Examiner believes may be reasonably construed as being related to the statutory requirements for patentability, and that narrow the claim scope. For each such amendment identified by the Examiner, it is respectfully requested that the representative named below be granted an opportunity to address the Examiner's belief that the amendment was made for a statutory requirement for patentability and that narrow the scope of the claim. In particular, it is requested that an opportunity be given to provide additional reasons and/or clarification for stating that these amendments are not related to any statutory requirement for patentability or do not narrow the scope of the claim. It is further requested that the representative named below be contacted by telephone regarding this matter.

It is believed that no fees are due with this amendment. However, in the event that fees are due, it is requested that the Applicant named below be contacted.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claim 179 has been amended as follows:

179. (Thrice Amended) A method for locating a wireless mobile station, comprising:
repeatedly performing the following steps (A1) through (A3) for tracking the mobile
station;

5 (A1) receiving a location estimate of the mobile station said location estimate obtained
from using at least one of (a) and (b) following:

- (a) first data obtained from wireless timing signals received by the mobile
station from one or more satellites, wherein said timing signals from each of the
one or more satellites identify a locus of locations of the mobile station; and
- 10 (b) second data obtained from time delays of wireless signals transmitted
between the mobile station and one or more transceivers of a plurality of
transceivers cooperatively linked together for use in locating the mobile station,
wherein said time delays identify a locus of locations of the mobile station from
at least one of the transceivers, and wherein for one of the one or more
transceivers, the time delays are obtained from signals transmitted during a
15 plurality of wireless signal transmissions between the mobile station and the one
transceiver, with at least one of the transmissions being from the mobile station
to the one transceiver;

wherein an instance of each of (a) and (b) is used at some time during the tracking of the
mobile station for determining a respective location of the mobile station;

20 (A2) determining a likely location of the mobile station by determining a likely roadway
upon which the mobile station is located;

(A3) providing information indicative of said likely location [information] for displaying
on a display device.

Claim 350 has been amended as follows:

350. (Once Amended) A method for locating mobile stations, comprising:
providing access to each of a plurality of mobile station location determining resources
for determining corresponding instances of location information for locating mobile stations
using corresponding data obtained from measurements of wireless signals transmitted between:

- 5 (iii) the mobile stations, and

- (iv) one or more of: (1) a plurality of communication stations capable of at least wirelessly detecting the mobile stations, and (2) one or more non-terrestrial wireless signal transmitting stations;

for each mobile station M of some of said mobile stations, perform steps (A) through (F)
10 following:

(A) first providing data to a first of said resources for obtaining a first instance of said corresponding location information for the mobile station M, wherein in determining said first instance, said first resource uses a result from a first location technique included in at least one of the location determining categories (b[c]1) through (b[c]5) following below said step of second
15 providing;

(B) second providing data to a second of said resources for obtaining a second instance of said corresponding location information for the mobile station M, wherein said second resource uses a result from a second location technique included in at least one of the location determining categories (b[c]1) through (b[c]5) that does not include said first location technique, and wherein
20 for at least one occurrence of locating one of the mobile stations, said first and second instances include different geographical extents for locating the one mobile station:

(b1) a category of pattern recognition location determining techniques, wherein each said pattern recognition technique determines a geographical extent G_a for a location of a mobile station (M_a) by identifying a pattern of multipath signal characteristics for wireless signals communicated between M_a and the communication stations as likely to have been a result of M_a being in G_a , wherein
25 said multipath signal characteristics are indicative of non-line of sight communications;

(b2) a category of trainable location determining techniques, wherein each said trainable technique determines a geographical extent G_b for a location of a mobile station (M_b) as a result of said trainable technique:
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(I) generating an association for associating: (i) each location L of a plurality of geographical locations with (ii) corresponding measurements of wireless signals transmitted between some one of said mobile stations and the communication stations, wherein said some mobile station is approximately at
35 the location L, and

- (II) using said association together with characteristics of signals communicated between M_b and the communication stations for determining the geographical extent G_b for the location of M_b ;
- 40 (b3) a category of offset determining techniques, wherein each said offset determining technique determines a geographical extent G_c for a location of a mobile station (M_c);
- wherein said offset determining technique is capable of utilizing timing measurements of wireless signals between the mobile station M_c and a plurality of
- 45 the communication stations for determining the geographical extent G_c ;
- wherein said timing measurements are a function of a signal time delay between the mobile station M_c and at least one communication station CS of the plurality of communication stations, and said timing measurements are for
- 50 determining G_c as function of at least: a location of CS, and a predetermined formula representative of a geometric curve for determining a horizontal position of M_c ;
- wherein there is a corresponding portion of the signal timing measurements that are obtained during a plurality of wireless signal transmissions between the mobile station M_c and CS, with at least one of the transmissions being from the
- 55 mobile station M_c to CS;
- wherein said communication station CS is attached to the ground; and
- wherein each of said offset determining techniques determines a geographical extent for a location of each of a plurality of different mobile stations;
- 60 (b4) a category of angle of arrival location determining techniques wherein each said angle of arrival technique determines a geographical extent for a location of a mobile station (M_d) by determining a direction from which wireless signals arrive at at least one of the communication stations from the mobile station M_d ;
- (b5) a category of signal processing techniques wherein each said signal processing technique determines a geographical extent for a location of a mobile station (M_e)
- 65 using wireless signals received at the mobile station M_e from the non-terrestrial transmitting stations, wherein said wireless signals provide time values, and said signal processing technique determines at least one differential between the time values for the wireless signals transmitted by two of the non-terrestrial transmitting stations;
- 70 (C) first obtaining first structured location data using said first instance;

(D) second obtaining second structured location data using said second instance;
wherein each of said first and second structured location data includes a common data representation for a plurality of location attributes, including (d1) through (d2) following:

75 (d1) an attribute A_1 for representing a geographical extent within which a mobile station being located is expected to be;

 (d2) an attribute related to one of: an error in data for A_1 , **and** a likelihood of the mobile station being located being in the geographical extent represented by A_1 ;

80 (E) generating subsequent location information of a location L_M of the mobile station M, said subsequent location information being dependent upon said attributes (d1) and (d2) for each of said first and second structured location data; and

 (F) outputting said subsequent location information to a predetermined destination on a communications network.